

Work Order ID 85261

85261

Page 1

June-05-12 10:51:01 AM

Item ID: D3304-041

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Tube Assembly

Start Date: 05/06/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 19/06/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 12/06/05 Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3304

Rev B

100

0.00

100

BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut to lengh

12-06-13

4

110

0.00

110

CONVENTIONAL LATHE

Lathe Conv

Memo

0.00

Conventional Lathe

Cut blank: 15.75" as per Dwg D3304 Turn as per Dwg D3304 Identify as D3304-1

12-06-13

4

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

Quality Control

12-06-14

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.00

Quality Control

140

Small Fab

0.00

140

Small Fab

Memo

0.00

Small Fab

Deburr

Drill as per Dwg D3304 using drill Jig D3304-T1Deburr

150

QC5- Inspect part completeness to step on W/O

0.00

150

QC

Memo

0.00

Quality Control

5/11 12/06/14

4

0

FF
12-07-09

4

Sa 6/2/10

(x4)

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4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
160	Large Fab								
Large Fab	Memo	0.00							
Large Fab	Weld bracket as per Dwg D3304 and QSI 004								
170		0.00							
170	QC9- Inspect visual per QSI004- Fusion Welds								
QC	Memo	0.00							
Quality Control									
180		0.00							
180	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.00							
Quality Control									

4

12-7-18

4x

12-7-18

24

AS 16

12/17/12

74

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

190

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

3200F

11-45

4X ϕ

Mx
12/07/19

200

QC3- Inspect Part Finish

0.00

200

QC

Memo

0.00

Quality Control

4 ϕ

BR 12-7-19

210

Small Fab

0.00

210

Small Fab

Memo

0.00

Small Fab

Assemble lanyard and pip pin as per Dwg D3304

4 ϕ

FF
12-07-19

M 121279

11-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____

Tooling:

Date: _____

Run Start ***NR1***

QC: _____ Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220 *220* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00		DAS 16 9-83 12/07/12		(74)			
230 *230* Packaging Packaging	Identify as per dwg & Stock Location: <u>8186</u> Memo	0.00 0.00				4x		8P. 12-7-24.	
240 *240* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00						12/17/24 JG MF 12-07-24	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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NOTE: Date & initial all entries

Picklist Print

June-05-12 10:51:04 AM

Page 1

Work Order ID: 85261

85261

Parent Item: D3304-041

D3304-041

Parent Item Name: Tube Assembly

Start Date: 05/06/2012

Required Date: 19/06/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP: C04.11.17Step 13 revisedKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

CBL-1240

Purchased

No

100

f

385.6817

1.0417

4.1668

CBL-1240

Cable

**

(4) FF 12-07-19

Location

Loc Qty

Loc Code

GA

385.681659

113565

3.911789

119021

368.73647

119690

13.0334

4.1668

M304TR0.875W.065

Purchased

No

160

f

47.0000

1.3437

5.657684

M304TR0 875W 065

304 round tube .875 x .065w

**

Location

Loc Qty

Loc Code

MAT017

47

110680

7

121317

40

6.0 12-06-13

BLBS-0016

Purchased

No

210

Each

9.0000

1

4

RI RS-0016

PIP PIN

**

(4) FF 12-07-19

Location

Loc Qty

Loc Code

ST283

9

113565

9

4

CBL-460

Purchased

No

210

Each

786.0000

2

8

CBL-460

Loop Sleeve

**

(4) FF 12-07-19

Location

Loc Qty

Loc Code

GA

786

121574

786

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

June-05-12 10:51:05 AM

Page 2

Work Order ID: 85261

Parent Item: D3304-041

Parent Item Name: Tube Assembly

85261

D3304-041

Start Date: 05/06/2012

Required Date: 19/06/2012

Start Qty: 4.00

Required Qty: 4.00

D3304-5

Manufactured No

210

Each

19.0000

1

4

D3304-5

Bracket

**

Q 12-7-18

Location

Loc Qty

Loc Code

WA022

19

54570

19

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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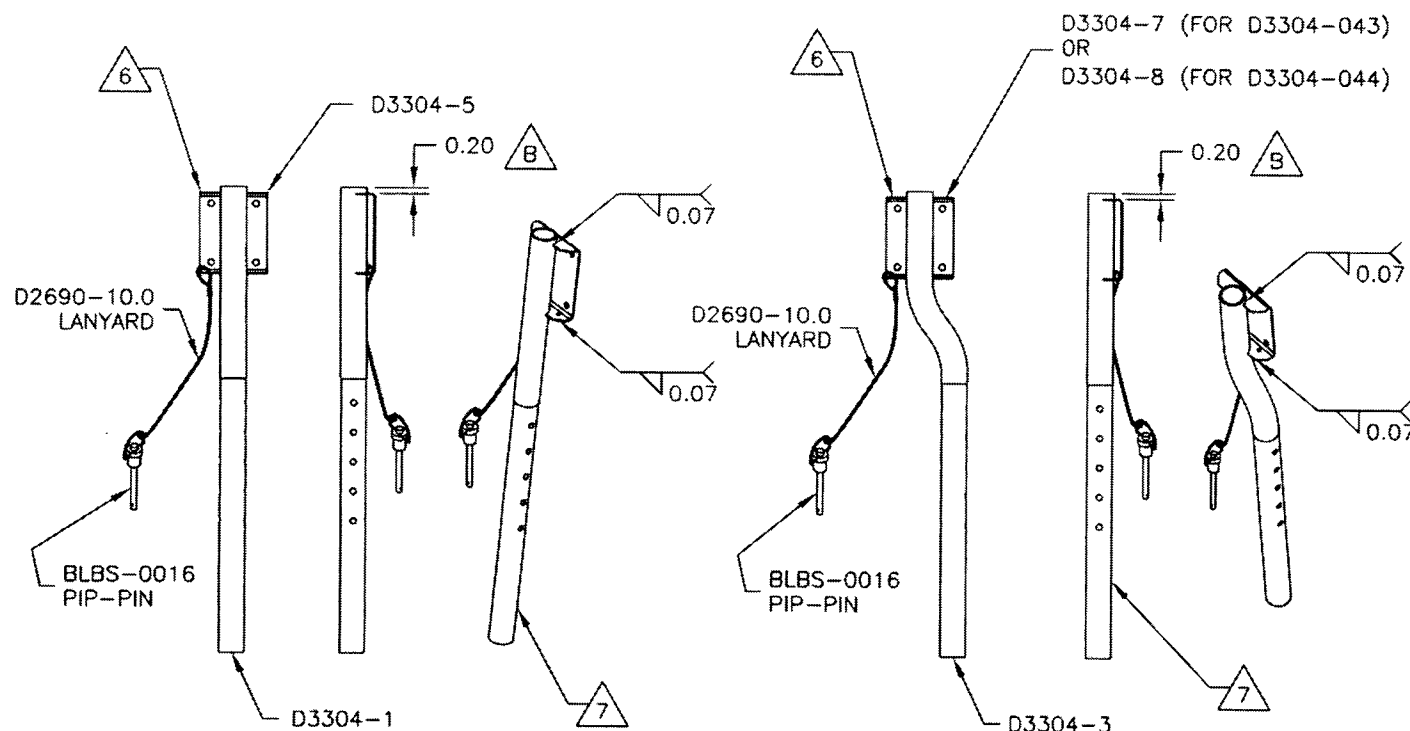
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NOTE: Date & initial all entries



DESIGN	RF	DRAWN BY	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED		APPROVED		DRAWING NO. D3304
DATE	05.07.15	TITLE	TUBE ASSEMBLY	REV. B
A	04.08.18	SCALE	1:6	
B	05.07.15	UPDATE DIMENSIONS; ADD D3304-7/-8		



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

WORK ORDER
NO. 85261 MLJ

12/06/05

D3304-041/-043/-044 NOTES:

- 1) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 2) WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) IDENTIFY AS INDICATED USING FINE POINT PERMANENT INK MARKER "TCCA-PDA, DART AEROSPACE LTD, P/N D3304-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"
- 7) IF BEING ASSEMBLED WITH D3303-041, ADD THE FOLLOWING USING A FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD, P/N D412-724-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

RELEASED
05 08 11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

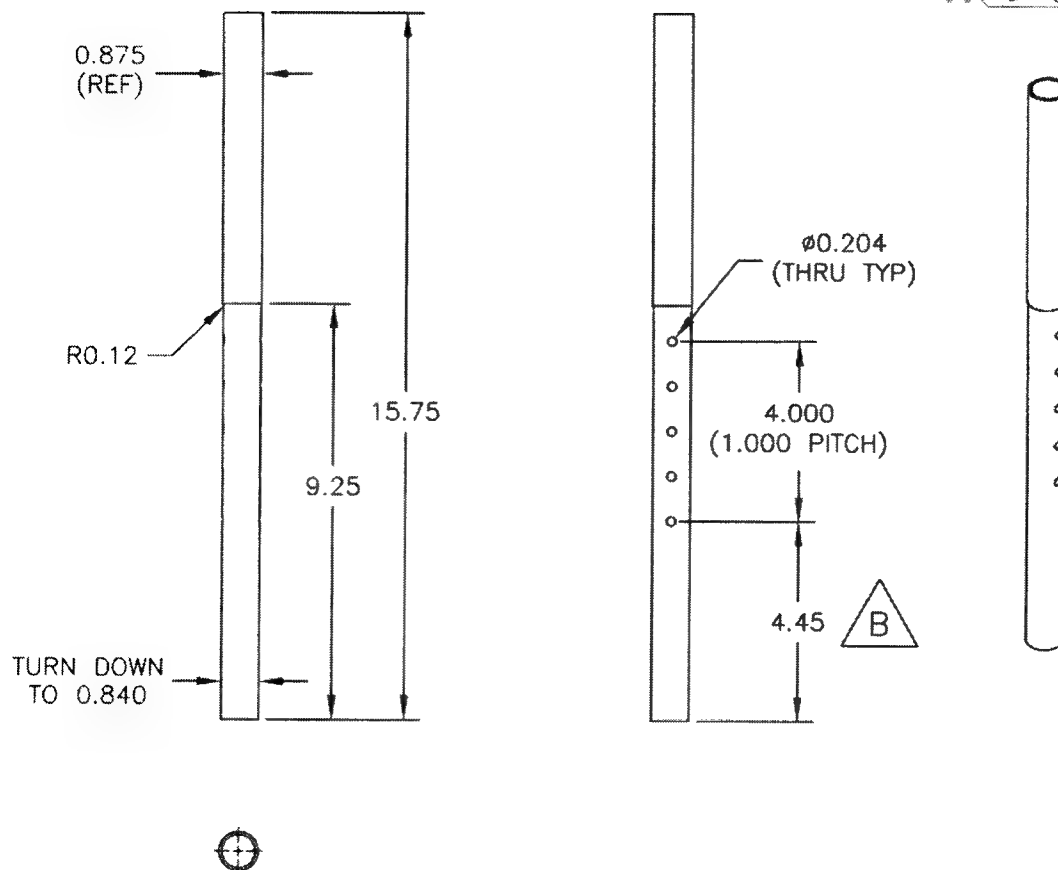
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3304	REV. B SHEET 2 OF 4
DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4

RELEASED
05-08-11 *[Signature]*



D3304-1 TUBE

D3304-1 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE $\phi 0.875 \times 0.065$ WALL
(REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

10261

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Dart Aerospace Ltd

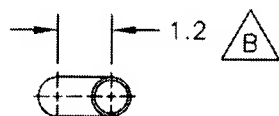
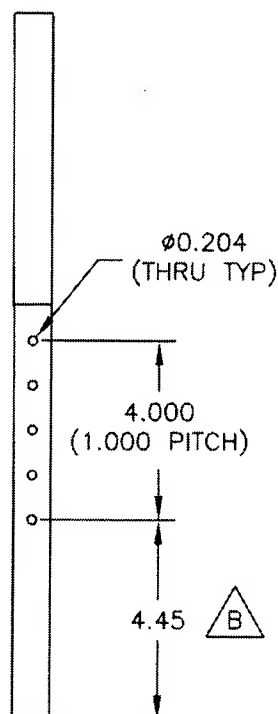
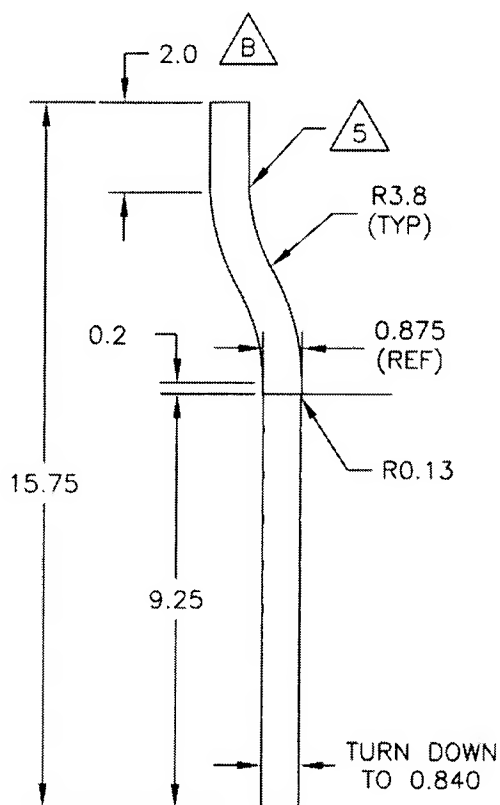
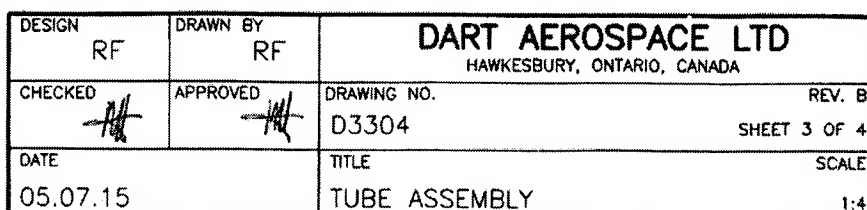
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries



D3304-3 TUBE

D3304-3 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE $\varnothing 0.875 \times 0.065$ WALL
(REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) BEND LINES 9.625, 13.375 DIMENSIONS

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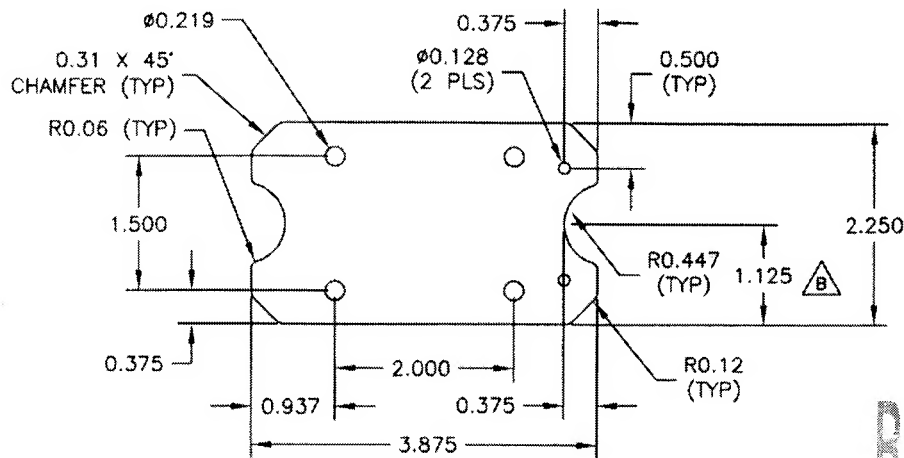
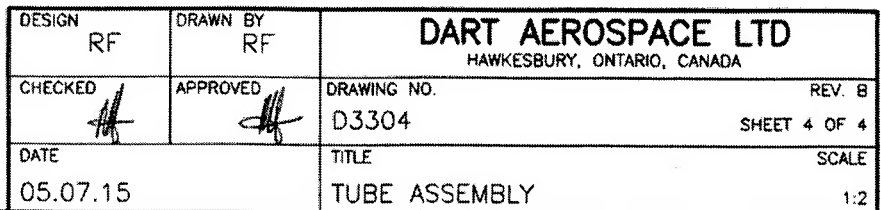
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

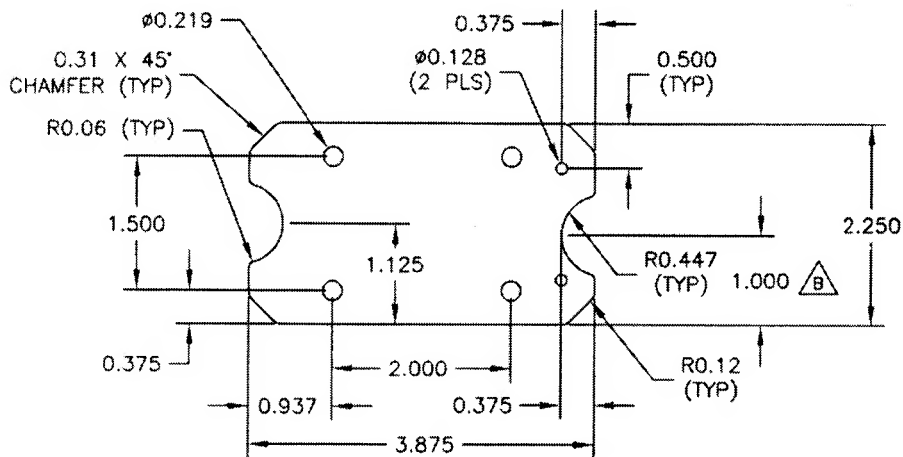
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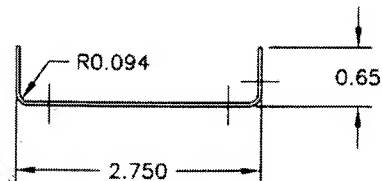
NOTE: Date & initial all entries



D3304-5 FLAT PATTERN



D3304-7/-8 FLAT PATTERN



D3304-5/-7 BRACKET
D3304-8 OPPOSITE

1) MATERIAL: AISI 304/316 SS 0.040 THICK SHEET (REF. DART SPEC M304S20GA)
2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
3) ALL DIMENSIONS ARE IN INCHES
4) BREAK ALL SHARP EDGES 0.005 TO 0.015

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